WHAT IS CLAIMED IS:

A mismatch modeling tool comprising:

a software implemented transistor mismatch model;

at least one editable mismatch model data library comprising process parameter variables accessed by said software implemented transistor mismatch model;

- a circuit simulation library and program data output accessed by said software implemented transistor mismatch model; and
- a graphical interface to said software implemented transistor mismatch model.
- 2. The mismatch modeling tool of Claim 1 wherein said graphical interface comprises a menu driven modeled device selection frame.
- 3. The mismatch modeling tool of Claim 2 wherein said menu driven modeled device selection frame configures said software implemented transistor mismatch model to display a dynamically generated input data frame within said graphical interface.

- 4. The mismatch modeling tool of Claim 3 wherein said dynamically generated input data frame reflects data input fields of one of a plurality of input scenarios comprising at least one of:
 - a voltage driven scenario;
 - a current driven scenario;
 - a differential pair scenario;
 - a resistor scenario; and
 - a capacitor scenario.
- 5. The mismatch modeling tool of Claim 4 wherein said dynamically generated input data frame comprises a plurality of data input columns comprised of at least one of:
 - a plurality of single-data input parameter fields;
 - a plurality of string-of-data input parameter fields; and
 - a plurality of range-of-data input parameter fields.

6. The mismatch modeling tool of Claim 5 further comprising an electronically transmitted ASCII output data file, said ASCII output data file comprising output data reflecting at least one of:

said plurality of single-data input parameter fields;
said plurality of string-of-data input parameter fields;
and

said plurality of range-of-data input parameter fields.

- 7. The mismatch modeling tool of Claim 6 wherein said ASCII output data file is an emailed ASCII output data file.
- 8. The mismatch modeling tool of Claim 6 further comprising a three dimensional output plot, said three dimensional output plot being a graphical representation of said output data within said ASCII output data file.
- 9. The mismatch modeling tool of Claim 5 further comprising a dynamically generated output data frame, said dynamically generated output data frame displaying output data reflecting said plurality of single-data input parameter fields.

- 10. A mismatch modeling tool comprising:
- a software implemented transistor mismatch model;
- at least one editable mismatch model data library comprising process parameter variables accessed by said software implemented transistor mismatch model; and
- a circuit simulation library and program data output accessed by said software implemented transistor mismatch model.
- 11. The mismatch modeling tool of Claim 10 further comprising a graphical interface to said software implemented transistor mismatch model.
- 12. The mismatch modeling tool of Claim 11 wherein said software implemented transistor mismatch model is configurable for a plurality of input scenarios comprising at least one of:
 - a voltage driven scenario;
 - a current driven scenario;
 - a differential pair scenario;
 - a resistor scenario; and
 - a capacitor scenario.

- 13. The mismatch modeling tool of Claim 12 wherein said graphical interface comprises a dynamically generated input data frame, said dynamically generated input data frame displaying parameters reflecting a selected said input scenario.
- 14. The mismatch modeling tool of Claim 13 wherein said dynamically generated input data frame comprises a plurality of data input columns comprised of at least one of:
 - a plurality of single-data input parameter fields;
 - a plurality of string-of-data input parameter fields; and
 - a plurality of range-of-data input parameter fields.
- 15. The mismatch modeling tool of Claim 14 further comprising a dynamically generated output data frame, said dynamically generated output data frame displaying output data reflecting said plurality of single-data input parameter fields.

16. The mismatch modeling tool of Claim 14 further comprising an electronically transmitted ASCII output data file, said ASCII output data file comprising output data reflecting at least one of:

said plurality of single-data input parameter fields;
said plurality of string-of-data input parameter fields;
and

said plurality of range-of-data input parameter fields.

- 17. The mismatch modeling tool of Claim 16 further comprising a three dimensional output plot, said three dimensional output plot being a graphical representation of said output data within said ASCII output data file.
- 18. The mismatch modeling tool of Claim 13 wherein said dynamically generated input data frame comprises a plurality of data input columns comprised of at least one of:
 - a plurality of string-of-data input parameter fields; and
 - a plurality of range-of-data input parameter fields.

19. The mismatch modeling tool of Claim 18 further comprising an ASCII output data file, said ASCII output data file comprising output data reflecting at least one of:

said plurality of string-of-data input parameter fields;
and

said plurality of range-of-data input parameter fields.

20. The mismatch modeling tool of Claim 19 further comprising a three dimensional output plot, said three dimensional output plot being a graphical representation of said output data within said ASCII output data file.